

2. Dorsum *fw* nearly straight, only slightly bowed. Costa *hw* also nearly straight or only slightly bowed at centre.

3. Beneath more greyish-ochreous than yellowish-brown, with darker striation and bars. General markings much the same; but sub-basal band across cell *fw* and *hw*—especially *fw*—darker than in ♂ and discal band broad and inner edge sharper than in male. *Unh* spots cell and base obscure.

4. Above general colour dull bronze: series of five white spots parallel to termen. Nos. 2, 3, 4 most prominent, in decreasing magnitude. Nos. 1 and 5 varying from obscure to distinct, but not clear as Nos. 2, 3, 4. Nos. 2, 3, 4 appear beneath between discal and postdiscal bands, as in male.

5. Just below costa, above end cell a whitish spot, and between this and No. 3 of the postdiscal series two very pale purplish patches, white in centre.

6. Whereas in ♂ the dark brown *upf* reaches almost to the margin, in ♀ *upf* there is a lighter marginal and submarginal area, the inner edge of which corresponds to the outer edge of the postdiscal band below. This lighter area is continued *uph* as far as the tail. Also *uph* is a whitish discal spot, inward from tail, varying in obviousness.

J. A. YATES.

BANGALORE,

May 31, 1928.

[The female of *P. marshalli* was first described by Col. N. Manders. (*Ann. Mag. Nat. Hist. London* (6), 1910.) Eds.]

#### XXIV.—A SHORT NOTE ON A LYMANTRID CATERPILLAR (*DASYCHIRA MENDOSA*) (?) HUBN.<sup>1</sup> FEEDING ON MANGO LEAVES

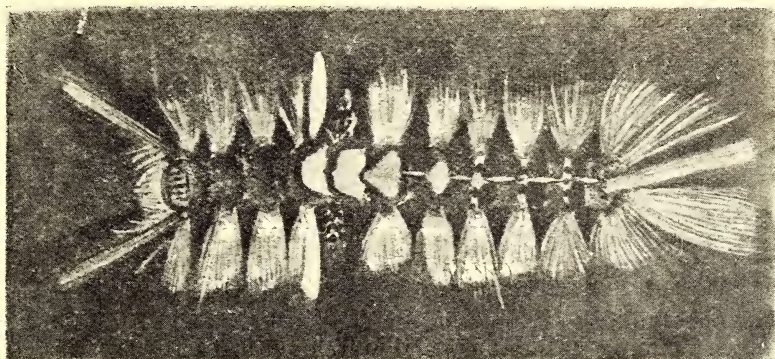
(*With a block*)

The Lymantrid larva, which is described below, was collected from a mango tree at Cossipore, a suburb of Calcutta, on March 13, 1928.

*Description of the Larva.*—Whereas in most other species of this group, the hairs are distributed more or less uniformly throughout the body, in the present species they are arranged in tufts, each segment bearing a pair in its lateral regions. These lateral tufts of hairs are long, erect and greyish-white in color. The general coloration of the body is mottled grey with red patches on certain segments. The head is somewhat oval in shape and bears an additional pair of long tufts of hair in its dorsolateral regions. The additional tufts in the head look very much like a pair of antennæ and these together with a similar tuft on the last abdominal

<sup>1</sup> Unfortunately, in the present state of our knowledge of the group, several species are mixed up under this name, and this note may prove an incentive to further research on the life-histories of Lymantrids.

segment may at times serve the purpose of frightening its enemies. They usually remain projecting forwards making an angle of about  $45^{\circ}$  with the longitudinal axis of the body (see Fig.).



LARVA : (*Dasychira mendosa*) (?) HUBN

The first two thoracic segments are sub-equal and without any ornamentation. The third on the other hand possesses in addition to the lateral tufts, another pair of tuft of hairs which are white in colour. Dorsally the third thoracic segment bears an arc-shaped pad composed of creamy yellow pilose hairs.

In the first abdominal segment the lateral tufts are different in shape and structure from those of the rest of the body segments. They are short and greyish black mottled with white. This segment also bears dorsally an irregularly oval area similar to that of the preceding segment. The second abdominal segment bears dorsally a similar triangular pilose area, while on the third abdominal segment the triangular pilose area is smaller than that on the second. Mid-dorsally a fine whitish pilose line runs backwards from the posterior edge of the creamy yellow pilose pad of the second abdominal segment to the middle of the last abdominal segment. The fourth, fifth and sixth segments bear mid-dorsally a transverse pilose band speckled with reddish pilose spots. The seventh or the last abdominal segment bears an additional pair of posteriorly directed tufts similar to the lateral ones.

The thoracic as well as the pro-legs are pinkish in coloration. The only larva that was collected measured roughly 30 mm. in length and 3mm. in breadth.

The larva in captivity was fed on young mango leaves and the full-fed larva pupated on the night of March 14, 1928. The pupal cocoon is oval in shape and brownish-white in color. It was spun in a top corner of the glass trough in which the larva was kept and is composed of larval hairs loosely gummed with a superimposed somewhat flimsy layer of loose silk. A few strands of loose silk irregularly gummed to the sides of the jar kept the cocoon in position. The cocoon was interspersed with larval frass,

The adult emerged on March 22, 1928, at night and has been presented to the Indian Museum Collection.

I have to record herein my thanks to Mr. T. Bainbrigge Fletcher, Imperial Entomologist to the Government of India, who so kindly identified the imago for me.

S. MUKERJI, M.Sc.,

*Zoological Survey of India.*

## XXV.—A PRELIMINARY NOTE ON THE POLLINATION OF THE CORAL TREE (*ERYTHRINA INDICA*, LAMK.)

(With two plates)

The observations recorded in this note were made by the writer during the months of February and March of 1926 and 1927, while at the Lucknow University. A detailed study of the plant with special reference to its pollination, will form the subject of another paper which will be published later.

There are only a few flowering plants which are pollinated by the agency of birds. The phenomenon involved is a very specialized one and is technically known as Ornithophily. The genus *Erythrina*—to which the popularly known coral-trees belong—is peculiarly interesting among the *Leguminosæ*, because in some of its species ornithophily seems to have been established. Delpino was one of the earliest investigators who supposed that cross-pollination in *Erythrina crista-galli*, a Brazilian species, takes place by the agency of humming birds.<sup>1</sup> Later Thomas Belt<sup>2</sup> established that in a species of *Erythrina* in Nicaragua, the fertilization was effected by humming birds.

This observation was followed by that of Trelease<sup>3</sup> who showed that in *Erythrina herbacea*, cross-pollination was carried on by ruby-throated birds. But as far as I am aware nothing adequately is known about the pollination of *Erythrina indica*, Lamk., which also seems to be Ornithophilous.

*Erythrina indica*, Lamk. (the *Parijata* tree of the Sanskrit authors) is a native of Bengal near the sea,<sup>4</sup> but is now cultivated in gardens or on road-sides as an ornamental plant and is also 'largely planted as shade for coffee, etc. and as support for pepper'.<sup>5</sup> It is a big-sized tree and towards the approach of March it sheds all its foliage leaves and consequently looks altogether bare but the most prominent and conspicuous feature of the tree during this season, is the large number of scarlet-coloured flowers which occur in bunches,

<sup>1</sup> Knuth, P. : (1908) *Hand Book of Flower Pollination* (English edition), vol. ii, p. 338.

<sup>2</sup> Belt, T. : (1880) *A Naturalist in Nicaragua*, p. 130.

<sup>3</sup> Trelease, W. : (1880) 'Fertilization of Flowers by Humming Birds' *Amr. Natur.* 14 : pp. 363-364.

<sup>4</sup> Watt, Sir George : (1908) *The Commercial Products of India*, p. 523.

<sup>5</sup> Willis, J. C. : (1919) *Flowering Plants and Ferns*, pp. 252-253.